PROJECT DESCRIPTION

<u>GENERAL</u>

THIS PROJECT INVOLVES RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL TO MAST ARM AT THE INTERSECTION OF US 13 (BUS) AND MD 250A/OLD VIRGINIA ROAD IN WORCESTER COUNTY.

US 13 (BUS.) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE EXISTING TRAFFIC SIGNAL SHALL BE REPLACED WITH A BASE-MOUNTED CABINET AND CONTROLLER WITH ALL THE NECESSARY EQUIPMENT AT THE INTERSECTION. THE INTERSECTION WILL OPERATE IN A FULLY-ACTUATED MODE USING 4 NEMA PHASES. THE US 13 (BUS) APPROACHES SHALL OPERATE CONCURRENTLY FOR NORTHBOUND AND SOUTHBOUND APPROACHES. THE MD 250A/OLD VIRGINIA ROAD APPROACHES SHALL OPERATE CONCURRENTLY FOR EASTBOUND AND WESTBOUND APPROACHES.

VIDEO DETECTION CAMERAS SHALL PROVIDE THE PRESENCE DETECTION FOR THE SIDE STREET APPROACHES.

PROJECT CONTACTS:

1. THE FOLLOWING ARE THE CONTACT PERSONS FOR THIS PROJECT:

MR. KENNETH CIMINO, ASSISTANT DISTRICT ENGINEER — TRAFFIC PHONE: (410) 677-4040

MR. GREG HOLSEY, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION PHONE: (410) 677-4020

MR. WAYNE WEICHMAN, ASSISTANT DISTRICT ENGINEER - MAINTENANCE PHONE: (410) 677-4010

MR. BRUCE POOLE, UTILITY ENGINEER PHONE: (410) 677-4082

MR. RICHARD DAFF, SR., CHIEF — TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7630

MR. EDWARD RODENHIZER, CHIEF - SIGNAL SHOP PHONE: (410) 787- 7652

MR. SONNY BAILEY, CHIEF - SIGN SHOP PHONE: (410) 787- 7676

THE POWER COMPANY REPRESENTATIVE:

DELMARVA POWER AND LIGHT COMPANY MR. RODNEY BAIN P.O. Box 250 WESTOVER, MARYLAND 21871 1(410)-860-6292

- 2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE STANDARD PLATES FOR TRAFFIC CONTROL FROM SECTION MD 104.00 OF THE SHA BOOK OF STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES.
- 3. UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410)787-7631 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

EQUIPMENT LIST 'A'

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
900000	1 EA	LOCAL CONTROLLER AND CABINET SIZE 6 W/ ALL NECESSARY EQUIPMENT HOUSED IN A BASE MOUNTED CABINET
900000	1 EA	VIDEO DETECTION INTERFACE UNIT 1-4 CAMERAS
900000	26 SF	FLAT SHEET ALUMINUM SIGNS CONSISTING OF:
	2 EA	D-3(1) (16"X VAR.) "Old Virginia RD" DUAL-FACED, MAST-ARM MOUNTED
	1 EA	SHIELD ASSEMBLY SIGN: M1-5(5) "NORTH, RIGHT ARROW, BUSINESS US 13 , SOUTH, LEFT ARROW" (24"x72") POLE-MOUNTED

<u>EQUIPMENT LIST 'B'</u>

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2002	2 CY	TEST PIT EXCAVATION
5001	30 EA	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKINGS SYMBOLS OR LEGENDS
5005	30 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
6002	20 SF	5 INCH CONCRETE SIDEWALK
8001	27 EA	12 INCH LED SIGNAL HEAD SECTION
8012	1 EA	EMBEDDED METERED SERVICE PEDESTAL
8020	1 EA	MAST ARM POLE & 70' MAST ARM ANY 'T' DIMENSION
8023	1 EA	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8028	4 EA	VIDEO DETECTION CAMERA AND CABLE ANY LENGTH
8032	155 LF	4 CONDUCTOR OPTICOM CABLE
8036	35 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED
8038	200 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8040	28 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8042	70 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8045	40 LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG-THHN/THWN
8046	2 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8047	1 EA	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764
8049	1 EA	OPTICOM NO. 721 DETECTOR EYE
8055	165 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8056	600 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8062	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT (ANY SIZE)

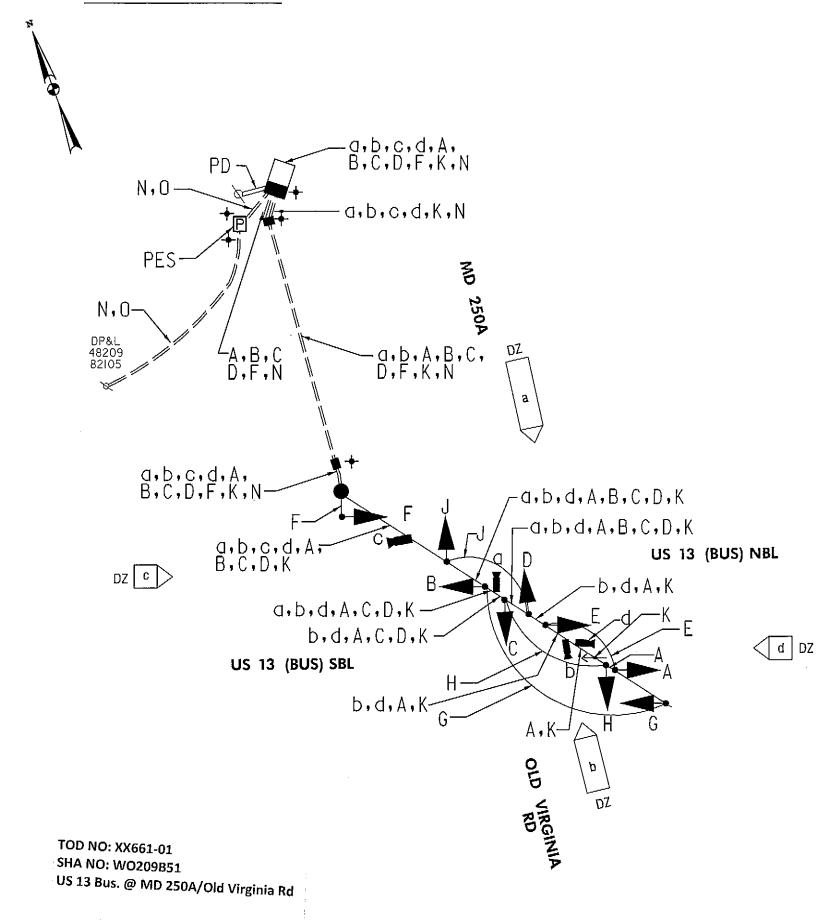
EQUIPMENT LIST 'C'

C. SHA SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL MATERIALS REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

1 2 3 4 5 6 7 8 9 Phase 2 & 6 2 & 6 Change Phase 4 & 8 4 & 8 Change $R \mid Y \mid Y$ PRE-EMPT 1 G G G R PRE-EMPT 1 Clearance G G PRE-EMPT 1 CHANGE YR Flashing FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R Operation

PHASE CHART

WIRING DIAGRAM



<u>WIRING KEY</u>

A,B,C,D,F - 7 CONDUCTOR NO. 14 AWG ELEC. CABLE

E,G,H,J - 5 CONDUCTOR NO. 14 AWG ELEC. CABLE (JUMPER)

K - 4 CONDUCTOR OPTICOM CABLE

d,b,c,d - VIDEO DETECTION CAMERA CABLE

N - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE

O - 1 CONDUCTOR NO. 4 AWG THHN/THWN ELEC. CABLE

PES — PROPOSED METERED PEDESTAL

DZ — DETECTION ZONE

PD — PROPOSED PHONE DROP

- GROUND ROD (3/4" DIA.x 10' LENGTH)

SXA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 13 BUS (MARKET ST.) AT

GENERAL INFORMATION SHEET

SCALENT	S ADVERTISED DATE	MAY 13, 2011 CONTRACT NOXX6615168	
DESIGNED BY_	JWA	COUNTY WORCESTER	
DRAWN BY	JKB	LOGMUE 23B01300 50	

LOGMILE 23B01300.50

TIMS NO. K-869

TS NO.1441 F-GI DRAWING SG - 2 OF 2 SHEET NO. 2 OF 2

CENTURY
ENGINEERING
CONSULTING ENGINEERS - PLANNERS

10710 GILROY ROAD HUNT VALLEY, MD 21031

Revision 'D'

CEI # 101195.38

PLOTTED: Tuesday, May 31, 2011 AT 01:46 PM FILE: J:\DATA\K869\PSE_DGN\pSG-P002_US13 (Bus) at MD 250.dgn